

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,254	/986,254 11/08/2001 Makoto Tomita		35.G2939	5021
5514	7590 08/25/2005	EXAMINER		
	ICK CELLA HARPEI ELLER PLAZA	MILIA, MARK R		
	K, NY 10112	ART UNIT	PAPER NUMBER	
			2622	
		DATE MAILED: 09/25/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	n No.	Applicant(s)				
Office Action Summary		09/986,25	i <b>4</b>	TOMITA, MAKOTO				
		Examiner		Art Unit				
		Mark R. M		2622				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)	Responsive to communication(s) filed on							
2a) <u></u> □	This action is <b>FINAL</b> . 2b) This action is non-final.							
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
<ul> <li>4) ☐ Claim(s) 1-22 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) ☐ Claim(s) is/are allowed.</li> <li>6) ☐ Claim(s) 1-22 is/are rejected.</li> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or election requirement.</li> </ul>								
Applicati	ion Papers							
9)⊠	The specification is objected to by the Examine	er.						
10)⊠	10)⊠ The drawing(s) filed on <u>11/8/01</u> is/are: a)⊡ accepted or b)⊠ objected to by the Examiner.							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.								
Attachment(s)								
1) Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  4) Interview Summary (PTO-413) Paper No(s)/Mail Date								
3) 🔯 Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 er No(s)/Mail Date <u>4/23/02</u> .	3)		Patent Application (PTO	-152)			

Art Unit: 2622

#### **DETAILED ACTION**

#### Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Fig. 11, reference character (S111), Fig. 12, reference characters (S124) and (S125), Fig. 15, reference character (S151), and Fig. 17, reference character (S175). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Specification

2. The disclosure is objected to because of the following informalities: On page 13, line 9, (303) should read (203) and line 19, (202) should read (302), on page 15, line 6, (202) should read (302), and on page 17, line 7, (305) should read (301). Appropriate correction is required.

## Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 15-21 are drawn to functional descriptive material NOT claimed as residing on a computer readable medium. MPEP 2106.IV.B.1(a) (Functional Descriptive Material) states:

"Data structures not claimed as embodied in a computer-readable medium are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer."

"Such claimed data structures do not define any structural or functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized."

Claims 15-21, while defining a print control program, do not define a "computerreadable medium" and is thus non-statutory for that reasons. A print control program

Art Unit: 2622

can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on "computer-readable medium" in order to make the claim statutory.

"In contrast, a claimed computer-readable medium encoded with the data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory." - MPEP 2106.IV.B.1(a)

#### Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 8-13, 15-20 and 22 rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6891632 to Schwartz.

Regarding claims 1, 8, 15, and 22, Schwartz discloses a print control method, apparatus, and storage medium containing a print control program for performing print mode which is to a print request from processing in an optimal operation automatically determined an application in response program (see column 1 lines 9-14 and column 4

Art Unit: 2622

lines 42-50), said print control method comprising: a response acquiring step in which, by querying evaluation of a printing speed for the print the quality of print produced by processing or the print processing, a response is acquired (see column 5 line 45-column 6 line 15 and column 6 line 65-column 7 line 20), and a determination step in which, when the print processing is performed in response to a later print request, an operation mode is determined based on the response acquired in said response acquiring step (see column 7 lines 11-15, column 9 lines 12-25, and column 10 lines 19-26).

Regarding claims 2, 9, and 16, Schwartz discloses the system discussed in claims 1, 8, and 15, and further discloses a print data generating step for, in response to the print request from said application program, generating print data in intermediate condition which is not dependent on a particular page description language (see column 6 line 65-column 7 line 4 and column 11 lines 41-47), and a print data analyzing step for analyzing the generated print data after temporarily storing the generated print data (see column 6 line 40-column 7 line 39, column 8 lines 34-52, column 9 lines 12-33, and column 11 lines 27-30).

Regarding claims 3, 10, and 17, Schwartz discloses the system discussed in claims 2, 9, and 16, and further discloses, based on a predetermined selection criterion used when the optimal operation mode is automatically determined from data obtained by analyzing the print data and on the response acquired in said response acquiring step, a selection criterion for newly performing automatic setting of the operation mode is set, wherein, in said determination step, the operation mode is determined based on data obtained by analyzing print data which is input in response to said later print

Art Unit: 2622

request and on the newly set selection criterion (see column 3 lines 65-67 and column 4 lines 21-27).

Regarding claims 4, 11, and 18, Schwartz discloses the system discussed in claims 3, 10, and 17, and further discloses a classification step for outputting classification data by analyzing the print data so that the print data is classified into one of classifications based on the type of the print data (see column 7 lines 21-31 and column 7 line 40-column 8 line 33, reference shows that print data is made up of one of three kinds of objects to be drawn, the three being bitmaps, graphics, and text and depending on which of these is to be output, the calculations about the processing and the selection of an optimal print model are decided), and a storage step in which, based on the response acquired in said response acquiring step and the classification data output in said classification step, a printing-mode-selecting criterion used when the print processing is performed in response to said later print request is determined for each of the classifications, and the determined selecting criterion is stored (see column 6 line 40-column 7 line 11, column 8 lines 30-62, and column 9 lines 1-9, reference shows that data is stored in either the printer or the host and is processed depending on the type of print data in a particular manner).

Regarding claims 5, 12, and 19, Schwartz discloses the system discussed in claims 4, 11, and 18, and further discloses wherein, in said determination step, the determined selecting criterion stored in said storage step is used as a criterion for, by comparing each of the classifications with the print data, determining an operation mode used when the print processing is performed on said print data to be printed (see

Art Unit: 2622

column 5 line46-column 6 line 15 and column 6 line 40-column 8 line 62, reference shows that based on the print quality and speed and the type of print data, bitmap, graphic, or text, an optimal print mode is selected and the print data is processed accordingly).

Regarding claims 6, 13, and 20, Schwartz discloses the system discussed in claims 2, 9, and 16, and further discloses wherein, in said response acquiring step, by using a plurality of options to query the evaluation of the printing speed for the print processing or the quality of print produced by the print processing, a selected option is acquired as the response (see column 5 line 46-column 6 line 15 and column 6 lines 29-34, reference shows that a user can manually choose the print mode desired if the outcome is not what the user predicted).

#### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7, 14, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz as applied to claims 1, 8, and 15 above, and further in view of U.S. Patent No. 6665425 to Sampath et al.

Art Unit: 2622

Schwartz does not disclose expressly a test-print designation step for

designating a test print in which a process of querying the evaluation of the print is

performed, wherein, when the test print is designated in said test-print designation step,

the evaluation of the print is queried in said response acquiring step.

Sampath discloses a test-print designation step for designating a test print in

which a process of querying the evaluation of the print is performed, wherein, when the

test print is designated in said test-print designation step, the evaluation of the print is

queried in said response acquiring step (see column 6 lines 37-50 and column 7 lines

39-49).

Schwartz & Sampath are combinable because they are from the same field of

endeavor, printing based on image quality.

At the time of the invention, it would have been obvious to a person of ordinary

skill in the art to combine the test printing and evaluation as described by Sampath and

well known in the art with the system of Schwartz.

The suggestion/motivation for doing so would have been to improve customer

satisfaction and verify the results are those that the customer desires.

Therefore, it would have been obvious to combine Sampath with Schwartz to

obtain the invention as specified in claims 7, 14, and 21.

Art Unit: 2622

#### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. To further show the state of the art refer to U.S. Patent numbers 6665081 (Suzuki et al.), 5471564 (Dennis et al.), 6301013 (Momose et al.), 6241334 (Haselby), and 6853464 Ueda et al.).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571) 272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached at (571) 272-7402. The fax number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark R. Milia Examiner Art Unit 2622

MRM

JOSEPH P. POKRZYWA
PRIMARY EXAMINER
ART UNIT 2622
JOSEPH R Phym